MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

Firestone Building Products Company
3525 South Arlington
Indianapolis, Indiana 46203

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 097-12488-00140	
Issued by: Vaneeta M. Kumar Administrator, ERMD City of Indianapolis	Issuance Date: Expiration Date

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Environmental Resources Management Division (ERMD). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary facility for manufacturing asphalt roofing materials.

Authorized Individual:	Jeff Alford
Source Address:	3525 South Arlington, Indianapolis, Indiana 46203
Mailing Address:	3525 South Arlington, Indianapolis, Indiana 46203
Phone Number:	317-784-1161
SIC Code:	2952
County Location:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) modified bitumen asphalt roofing line (line no.1) identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 lbs of roll roofing per hour. The system consists of three 12 ton capacity mix tanks, one 10 ton capacity mix tank, one 15 ton use tank, and one impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to stack 1.

(b) One (1) Built Up Roofing (BUR) system (line no. 2) identified as EU-12, constructed in 1998, with a maximum capacity of 13,689 lbs of roll roofing per hour. The system consists of one (1) saturator, or coater, where heated bitumen asphalt will be applied to continuously-fed fiberglass and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated polyester substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to stack 4.

(c) One (1) mixing screw and surge tank, identified as EU-15, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(d) One (1) 100 ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to stack 2.

(e) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to stack 7.

(f) One (1) limestone receiving bin, identified as EU-14, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to stack 5.

(g) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(h) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3.

(i) One (1) Inferno Therm Polyolefin (APP) Heater - natural gas fired, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8.

(j) Two (2) 3,470 cubic foot (98.25 cubic meter) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausting to stack 1.

(k) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(l) One (1) 3,370 cubic foot (95.41 cubic meter) liquid polypropylene storage tank, installed in 1990, using no controls, and exhausting to the atmosphere.

(m) One (1) American Process Bag breaker with a maximum capacity of 400 pounds per hour of talc, sand and other surfacing agents, using no control, and exhausting inside the building.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.5 Minor Source Operating Permit Renewal [326 IAC 2-6.1-7]

Pursuant to 326 IAC 2-6.1-7, an operating permit shall be valid for a period of time not to exceed five (5) years. However, permits may be valid for any lesser period if determined necessary for administrative reasons by IDEM, OAQ, or ERMD. At least ninety (90) calendar days prior to the expiration date of an operating permit, the applicant shall apply for a new operating permit from ERMD. If a timely and sufficient application for renewal has been made, the existing permit does not expire until a final decision on the application for renewal has been made by the department. The application for the operating permit renewal shall include the following information:

(a) Certification that the source has not changed from the initial permit issuance or that all modifications to the source have been reviewed and approved in accordance with this rule.

(b) Identification of any changes to the source that are subject to this article that have not received approval prior to construction or operation.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit of all criteria pollutants is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, and ERMD upon request and shall be subject to review and approval by IDEM, OAQ, and ERMD. IDEM, OAQ, and ERMD may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resource Management Division
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

Any such application should be certified by the "authorized individual" as defined by

326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, and ERMD U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch and ERMD, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, and ERMD shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate

sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM and ERMD, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity) monitor in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resource Management Division
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ and ERMD within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, and ERMD, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ and ERMD upon request and shall be subject to review and approval by IDEM, OAQ, and ERMD. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to

the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within “normal” parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the

"authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.15 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.16 Annual Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15th of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resource Management Division
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and ERMD on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM and ERMD may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, and ERMD representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or ERMD makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or ERMD within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Environmental Resource Management Division
Air Quality Management Section

2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and ERMD on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Environmental Resource Management Division
Air Quality Management Section
2700 South Belmont Avenue
Indianapolis Indiana 46221-2097

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and ERMD on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(a) One (1) modified bitumen asphalt roofing line (line no.1) identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 lbs of roll roofing per hour. The system consists of three 12 ton capacity mix tanks, one 10 ton capacity mix tank, one 15 ton use tank, and one impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to stack 1.

(b) One (1) Built Up Roofing (BUR) system (line no. 2) identified as EU-12, constructed in 1998, with a maximum capacity of 13,689 tons of roll roofing per hour. The system consists of one (1) saturator, or coater, where heated bitumen asphalt will be applied to continuously-fed fiberglass and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated polyester substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to stack 4.

(c) One (1) mixing screw and surge tank, identified as EU-15, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2][40 CFR 60.470 (Subpart UU)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from line 1 operations (EU-01), line 2 operations (EU-12) and the mixer and surge tank (EU-15) shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The process weight rate per hour of line 1 (EU-01) is 18,836, therefore pursuant to the table in 326 IAC 6-3-2, the particulate emissions are limited to 18.42 lbs/hour. The process weight rate per hour of line 2 (EU-12) is 13,689, therefore pursuant to the table in 326 IAC 6-3-2, the particulate emissions are limited to 14.87 lbs/hr. These limits are superceded by a more stringent emissions limitation pursuant to 40 CFR 60.470 Subpart UU below. See TSD Appendix A, page 9 of 9 for a direct comparison of the limits. The process weight rate per hour of the mixer and surge tank (EU-15) is 5,333 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 7.58 lbs/hour. There are no applicable limits on PM for the asphalt mixer and surge tank from Subpart UU. The asphalt mixer and surge tank is well under this requirement with an uncontrolled potential to emit of 3.15 tons per year.

D.1.2 Particulate Matter (PM) [326 IAC 12] [40 CFR 60.470 Subpart UU]

Pursuant to 40 CFR 60.472(a)(1)(ii), the Permittee shall not be caused to be discharged into the atmosphere (from line 1 and line 2 saturators) Particulate Matter (PM) emissions in excess of four tenths (0.4) of one kilogram of Particulate Matter (PM) per megagram of smooth surfaced roll roofing produced. Since approximately 129,068 megagrams of smooth surfaced roll roofing is produced, no more than 51.62 tons of (PM) emissions per year shall be emitted.

D.1.3 Opacity [326 IAC 12][40 CFR 60.470]

Pursuant to 40 CFR 60.472(a)(3), visible emissions from line 1 operations (EU-01), line 2 operations (EU-12) and the mixer and surge tank (EU-15) shall not be in excess of twenty percent (20%) for any period of consecutive valid observations totaling 60 minutes from the Monsanto Mist Eliminator (EU-01). Emissions from line 1 operations (EU-01) are vented to CE-01. Emissions from line 2 operations (EU-12) and the mixer and surge tank (EU-15) are vented to CE-08.

D.1.4 VOC General Reduction Requirements [326 IAC 8-1-6]

Line 2 operations (EU-12) is subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the facility will have the potential to emit 25 tons or more of VOCs per year which are not otherwise regulated by other provisions of Article 8. (Pursuant to CP 0970140-01, issued on November 17, 1997, it has been determined that, when the costs of control, the benefits of control, the resultant increase in NO_x emissions are taken into account, the BACT VOC control is no control. Uncontrolled potential to emit for line 2 has been determined to be 42.22 tons of VOC emissions per year, therefore currently to meet 8-1-6 BACT requirements, the source is limited to 42.22 tons of VOC emissions per rolling 12 consecutive month period.)

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C.2 Preventive Maintenance Plan, of this permit, is required for line 1 operations (EU-01), line 2 operations (EU-12) and the mixer and surge tank (EU-15).

Compliance Determination Requirements

D.1.6 Particulate Matter (PM)

In order to comply with D.1.3, CE-01 shall be in operation and control emissions from line 1 operations (EU-01) at all times that line 1 (EU-01) is operating. CE-08 shall be in operation to control emissions from line 2 operations (EU-12) or the mixer and surge tank (EU-15) at all times that line 2 (EU12), or the mixer and surge tank (EU15) are operating.

D.1.7 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test line 1 operations (EU-01) and line 2 operations (EU-12) or the mixer and surge tank (EU-15) by this permit, however IDEM and ERMD may require compliance testing when necessary to determine if any of the emissions units are in compliance. If testing is required by IDEM or ERMD, compliance with the particulate matter limit specified in Condition D.1.2 or the VOC limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C.9 - Performance Testing

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Visible Emissions Notations

(a) Visible emission notations of the CE-01 stack exhausts once per week shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part

of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.9 Monsanto Mist Eliminator Parameter Monitoring

(a) The Permittee shall take readings of the total static pressure drop across the Monsanto Mist Eliminators (EU1 and EU8) at least once per week while in operation. Unless operated under conditions for which the Preventative Maintenance Plan specifies otherwise, the pressure drop across the Monsanto Mist Eliminators shall be maintained within the range of three (3) and twelve (12) inches of water. The Preventative Maintenance Plan for the Monsanto Mist Eliminator shall contain troubleshooting contingency and corrective actions for the Monsanto Mist Eliminator, when the pressure reading is outside of this range for any one reading.

(b) The instrument used for determining the pressure shall be subject to approval by ERMD and shall be calibrated at least once every six (6) months.

(c) The gauge employed to measure the pressure drop across the Monsanto Mist Eliminator or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within ± 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

(d) The permittee shall continuously monitor and record the temperature of the gas at the inlet of the mist eliminator. The temperature monitoring instrument shall have an accuracy of +/- 15^{o}C over its range.

(e) An inspection shall be performed each calendar quarter of the Monsanto Mist Eliminator. A defective Monsanto Mist Eliminator shall be repaired. A record shall be kept of the results of the inspection and the number of Monsanto Mist Eliminator repairs.

(f) In the event that the Monsanto Mist Eliminator's failure has been observed, based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.4, the Permittee shall maintain records of VOC usage .

(b) To document compliance with Condition D.1.8, the Permittee shall maintain records of weekly visible emission notations of the stack exhaust from CE-01

(b) To document compliance with Condition D.1.9, the Permittee shall maintain timely records of all parameters required by Condition D.1.9.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

(a) Quarterly summaries of the information to document compliance with Condition D.1.4 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(d) One (1) 100 ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to stack 2.

(e) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to stack 7.

(f) One (1) limestone receiving bin, identified as EU-14, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to stack 5.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from operation of the calcium carbonate storage silo (EU-02), the sand storage silo (EU-07) and the limestone receiving bin (EU-14) shall not exceed allowable PM emission rate based on the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The process weight rate per hour for the calcium carbonate silo (EU-02) is 5,333 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 7.58 lbs/hour. The process weight rate per hour for the sand silo (EU-07) is 15,585 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 16.22 lbs/hour. The process weight rate per hour for the limestone receiving bin (EU-14) is 3,560 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 6.03 lbs/hour.

D.2.2 Opacity [326 IAC 12] [40 CFR 60.470 Subpart UU]

Pursuant to 40 CFR 60.472(d), within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial startup of this facility, no owner or operator shall cause emissions with greater than one percent (1%) opacity.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.2.4 Particulate Matter (PM)

in order to comply with D.2.1 and D.2.2, the dust collector shall be in operation and control emissions from the lime receiving bin at all times that the lime receiving bin (EU-11) is in operation.

D.2.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.2.6 Visible Emission Notation [326 IAC 12][40 CFR 60.472(d)]

(a) Weekly visible emission notations of the CE-04, CE-07, and CE-06 exhaust stacks for this facility shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.6, the Permittee shall maintain records of weekly visible emission notations of the stack exhaust from CE-04, CE-07, and CE-06.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(g) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(h) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3.

(i) One (1) Inferno Therm Polyolefin (APP) Heater - natural gas fired, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.3.1 Particulate Matter (PM) [326 IAC 6-2-4]

326 IAC 6-2-4 applies to the 6 MMBtu/ hr thermal fluid heater (EU-03)and the 6 MMBtu/hr natural gas-fired Heatec Asphalt Heater and Storage Tank (EU-13).

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where:

Pt= Pounds of particulate matter emitted per million BTU (lb/mmBtu) heat input
Q=Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input. The maximum heating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The value of Q for this facility is 12, therefore this facility is limited to 0.57 pounds of particulate matter per million Btu input.

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(j) Two (2) 3,470 cubic foot (98.25 cubic meter) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausting to stack 1.

(k) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(l) One (1) 3,370 cubic foot (95.41 cubic meter) liquid polypropylene storage tank, installed in 1990, using no controls, and exhausting to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.4.1 Opacity [326 IAC 12][40 CFR 60.470 Subpart UU]

Pursuant to 40 CFR 60.472(c), within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial startup of this facility no owner or operator shall cause emissions with greater than zero percent (0%) opacity from the three asphalt storage tanks, except for one consecutive 15 minute period in any 24 hour period for each tank when the transfer lines are being blown for clearing. If, however, the emissions from any asphalt storage tank(s) are ducted to a control device for a saturator the combined emissions shall meet 20% opacity from the control device, pursuant to 40 CFR 60.472(a). Since this is the case for all asphalt storage tanks (CE-01 for the asphalt storage tanks, CE-08 for the oxidized asphalt storage tank) , 0% opacity shall not apply to this facility unless the control equipment is not in operation.

Compliance Determination

D.4.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.4.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.4.3 Record Keeping Requirement [326 IAC 12][40 CFR 60.116b]

Pursuant to the New Source Performance Standard 40 CFR Part 60.116b Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced after July 23, 1984, the Permittee shall keep readily accessible records showing the dimension or tank capacities of these tanks. These records shall be kept for the life of the source.

D.4.4 Reporting Requirement [326 IAC 12][40 CFR 60.116b]

Pursuant to the New Source Performance Standard 40 CFR Part 60.116b Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction,

Reconstruction or Modification Commenced after July 23, 1984, the Permittee shall notify IDEM, OAQ and ERMD within thirty (30) days when the maximum true vapor pressure of the liquid being stored in any tank exceeds 27.6 kiloPascals (kPa). Available data on the maximum true vapor pressure of the liquid being stored shall be in accordance with 40 CFR Part 60.116b(e). The report submitted by the Permittee requires the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(m) One (1) American Process Bag breaker with a maximum capacity of 400 pounds per hour of talc, sand and other surfacing agents, using no control and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from operation of the American Process Talc Bag breaker and the American Process Talc bag compactor shall not exceed allowable PM emission rate based on the following equations:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The process weight rate per hour for the American Process Talc Bag breaker is approximately 400 pounds per hour of talc, sand and other surfacing agents, therefore PM emissions shall not exceed 3.75 lbs per hour.

D.5.2 Opacity [326 IAC 12] [40 CFR 60.470 Subpart UU]

Pursuant to 40 CFR 60.472(d), within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial startup of this facility, no owner or operator shall cause emissions with greater than one percent (1%) opacity.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limit specified in Condition D.2.1 and D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements

D.5.5 Visible Emission Notation [326 IAC 12][40 CFR 60.472(d)]

(a) Weekly visible emission notations of the vents for this facility shall be performed during normal daylight operations whenever exhaust is being directed outside of the building. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.5.6 Record Keeping Requirements

(a) To document compliance with Condition D.5.5, the Permittee shall maintain records of weekly visible emission notations of the vents for this facility.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE
MSOP Quarterly Report

Source Name: Firestone Building Products
Source Address: Firestone Building Products
3525 South Arlington, Indianapolis, Indiana 46203
Mailing Address: Firestone Building Products
3525 South Arlington, Indianapolis, Indiana 46203
MSOP Permit No.: MSOP 097-12488-00140
Facility: Line 2 (Including Asphalt Mixer and Surge Tank
Parameter: VOC Emissions
Limit: 42.22 tons of VOC per rolling 12 month period
(To determine tons VOC emissions, multiply tons of asphalt used by 0.31lbs VOC/ton of asphalt used and divide by 2000 lbs/ton.)

QUARTER_____YEAR:_____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
INDIANAPOLIS ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION
AIR QUALITY MANAGEMENT SECTION
DATA COMPLIANCE

MINOR SOURCE OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Firestone Building Products
Source Address: 3525 South Arlington
Mailing Address: 3525 South Arlington
MSOP No.: 097-12488-00140

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	**Number of Deviations**	**Date of each Deviation**

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Air Quality
COMPLIANCE DATA SECTION
and
CITY OF INDIANAPOLIS
ENVIRONMENTAL RESOURCES MANAGEMENT DIVISION

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Firestone Building Products**
Address:	**3525 South Arlington**
City:	**Indianapolis, Indiana**
Phone #:	**317-575-7141**
MSOP #:	**MSOP 097-12488-00140**

I hereby certify that Firestone Building Products is **9** still in operation.
9 no longer in operation.

I hereby certify that 3525 South Arlington is:
9 in compliance with the requirements of MSOP 097-12488-00140.
9 not in compliance with the requirements of MSOP 097-12488-00140.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND
REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Environmental Resources Management Division

Addendum to the
Technical Support Document for MSOP

Source Name:	**Firestone Building Products**
Source Location:	**3525 South Arlington, Indianapolis, Indiana 46203**
County:	**Marion**
SIC Code:	**2952**
Operation Permit No.:	**097-12488-00140**
Permit Reviewer:	**Dana Armstrong**

On August 8, 2001, the Office of Air Quality (OAQ) and ERMD had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Firestone Building Products had applied for a MSOP to operate a stationary manufacturer of corrugated sheets. The notice also stated that OAQ and ERMD proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, OAQ and ERMD has made the following changes to the final MSOP:

In Section D.1.1, there was a comma after the word “from.” It was removed because it was incorrect punctuation.

In Section D.1.6, the first sentence did not begin with a capitol letter. This was corrected.

In Section A.2, and in the Facility Description Boxes for D.2 and D.3, there were several instances of sentences without periods on the end. These discrepancies were corrected.

In the “Compliance Requirements” section of the TSD, there was a requirement for the new units being added to line 2 (EU14 and EU15) to have an initial performance test. It was determined that these initial performance tests would be unnecessary because the equipment is venting to existing controls and the air flow coming from these new units was very small. This requirement was taken out of the permit prior to public notice, but it was not taken out of the TSD. The TSD requirement for EU14 and EU15 to have an initial performance test is not necessary and is hereby rescinded.

Indiana Department of Environmental Management
Office of Air Quality
and
City of Indianapolis
Environmental Resources Management Division

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	**Firestone Building Products Company**
Source Location:	**3525 South Arlington, Indianapolis, Indiana 46203**
County:	**Marion**
SIC Code:	**2952**
Operation Permit No.:	**097-12488-00140**
Operation Permit Issuance Date:	**November 17, 1997**
Permit Reviewer:	**Dana Armstrong**

The City of Indianapolis Environmental Resources Management Division (ERMD) and the Office of Air Quality (OAQ) has reviewed an application from Firestone Building Products Company relating to the construction and operation of a facility for manufacturing asphalt roofing materials.

Permitted Emission Units and Pollution Control Equipment

(a) One (1) modified bitumen asphalt roofing line (line no.1) identified as EU-01, constructed in 1990, with a maximum capacity of 18,836 lbs of roll roofing per hour. The system consists of three 12 ton capacity mix tanks, one 10 ton capacity mix tank, one 15 ton use tank, and one impregnation vat. The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausts to stack 1.

(b) One (1) Built Up Roofing (BUR) system (line no. 2) identified as EU-12, constructed in 1998, with a maximum capacity of 13,689 lbs of roll roofing per hour. The system consists of one (1) saturator, or coater, where heated bitumen asphalt will be applied to continuously-fed fiberglass and one (1) sand application process which will apply sand to the surface of the roll roofing (asphalt-saturated polyester substrate). The system uses one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausts to stack 4.

(c) One (1) mixing screw and surge tank, identified as EU-15, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(d) One (1) 100 ton storage silo for calcium carbonate filler material, identified as EU-02, constructed in 1990. Control equipment consists of one (1) Whirl Airflow dust collector identified as CE-04 for control, and exhausts to stack 2

(e) One (1) 50-ton capacity sand storage silo, identified as EU-07, handling 78,465 tons of

sand per year, constructed in 1994. The silo is equipped with an Ultra Industries baghouse identified as CE-07 for control, and exhausts to stack 7.

(f) One (1) limestone receiving bin, identified as EU-14, to be constructed, with a maximum capacity of 23,360 tons of limestone usage per year, using one (1) Whirl Airflow 600 cfm dust collector identified as CE-02 for control, and exhausting to stack 5.

(g) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-13, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 13.

(h) One (1) Heatec Thermal Fluid Heater - natural gas fired, identified as EU-03, installed in 1989, with a capacity of 6 million Btu per hour, using no controls, and venting to Stack 3

(i) One (1) Inferno Therm Polyolefin (APP) Heater - natural gas fired, identified as EU-08, installed in 1989, with a capacity of 0.8 million Btu per hour, using no controls, and venting to Stack 8

(j) Two (2) 3,470 cubic foot (98.25 cubic meter) asphalt storage tanks, installed in 1990, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-01 for control, and exhausting to stack 1.

(k) One (1) 3,470 cubic foot (98.25 cubic meter) oxidized asphalt storage tank, installed in 1998, using one (1) 11,300 cfm Monsanto Mist Eliminator (MME) identified as CE-08 for control, and exhausting to stack 4.

(l) One (1) 3,370 cubic foot (95.41 cubic meter) liquid polypropylene storage tank, installed in 1990, using no controls, and exhausting to the atmosphere.

(m) One (1) American Process Bag breaker with a maximum capacity of 400 pounds per hour of talc, sand and other surfacing agents, using no control, and exhausting inside the building.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Installation Permit 90140, issued on May 29, 1990; and

(b) Construction Permit 930140-01, issued on October 5, 1993; and

(c) Construction Permit CP-0970140-01, issued on November 17, 1997.

All conditions from previous approvals were incorporated into this permit except the following from:

(a) Installation Permit No. 90140, issued on May 29, 1990.

Condition 3: The Permittee shall not release emissions in excess of the amounts shown above. The amount shown is 0.04 kg of Particulate Matter (PM)/Mg of product.

Reason not incorporated: The Type IV Ply Sheet roofing should be subject to a limit of 0.4 kg of Particulate Matter (PM)/Mg of product pursuant to 40 CFR 60.472(a)(1)(ii), since it is smooth surfaced roll roofing.

(b) Construction Permit CP-0970140-01

Condition 13: The Permittee shall take readings of the total static pressure drop across the particulate control baghouse for the sand silo at least once per week.

Reason not incorporated: Although this facility is subject to an NSPS, this facility is not limited by any requirement other than an opacity limitation. The facility is subject to a daily visible emission notation and this should be sufficient compliance monitoring.

(c) Construction Permit CP-0970140-01

Condition 15: VOC emissions from the asphalt felt coating line shall be limited to 29 tons per year.

Reason not incorporated: The BACT analysis determined that no control for VOC was BACT. There are no limits on throughput other than maximum capacity. It is not necessary to state any limit on tons per year of VOC emissions.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
1	System/line 1, Two (2) Asphalt Storage Tanks	27	2.66	10,000	114
4	System/line 2, Mixing and Surge Tank, Oxidized Asphalt Storage Tank	27	2.66	10,000	114
2	Calcium Carbonate Silo	44	1	600	Ambient
3	Thermal Fluid Heater	18	1.5	1,900	550
7	Sand Silo	42	0.5	650	Ambient
8	APP Tank Heater	16	0.75	1,100	290
10	Warehouse Heater	34	1.33	NA	NA
11	Limestone Receiving Bin	34	0.75	600	Ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Administrator that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 15, 1996, with additional information received on October 2, 2000, March 22, 2001, and May 25, 2001.

Emission Calculations

See pages 1 through 9 of 9 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	38.41
PM-10	38.41
SO_2	0.00
VOC	55.43
CO	1.45
NO_x	6.93

HAP's	Potential To Emit (tons/year)
None	<10
TOTAL	<25

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2000 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	3.43
PM-10	3.43
SO_2	0.00
VOC	34.15
CO	0.00
NO_x	0.00
HAP (specify)	0.00

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO_2	maintenance
NO_x	maintenance
Ozone	maintenance
CO	attainment
Lead	unclassifiable

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD),

326 IAC 2-2 and 40 CFR 52.21.

(b) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Proposed Modification

PTE from the construction of the asphalt mixer and surge tank (EU-14) and the limestone receiving bin (EU-15) (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	6.31	6.31	0.00	13.90	0.00	0.00
Minor MSOP revision Threshold Level	25	25	25	25	100	25

This modification is a minor permit revision pursuant to 326 IAC 2-6.1-6(g)(4)(A). This modification alone would not require a construction permit or an affidavit of construction pursuant to 326 IAC 2-5.1, therefore model language for new construction will not be required in the permit, and an affidavit of construction is not required to be submitted by the source for the construction of the asphalt mixer and surge tank (EU-14), or the limestone receiving bin (EU-15).

This modification is not subject to any article 8 applicability. 326 IAC 8-1-6 does not apply because the new facilities do not have a potential to emit 25 tons of VOC per year. 326 IAC 8-6-1 does not apply since source wide potential to emit is not equal to 100 tons per year or greater. No other article 8 rules apply to the modification.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit 097-12488-00140, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
(a) each criteria pollutant is less than 100 tons per year,
(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the ERMD and OAQ inspectors assigned to the source.

Federal Rule Applicability

(a) The Permittee is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.470, Subpart UU), because the permittee operates saturators, mineral handling and storage facilities, and asphalt storage tanks at an asphalt roofing plant. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after the initial startup of such facility, no owner or operator shall cause exhaust gases greater than:

(1) One percent (1%) opacity from the limestone receiving bin, lime silo, bag breaker, or the sand storage silo.

(2) Twenty percent (20%) opacity for any period of consecutive valid observations totaling 60 minutes from the Monsanto Mist Eliminators (CE-01 and CE-08). Emissions from line 1 (EU-01) and the two asphalt storage tanks are vented to CE-01. Emissions from line 2 (EU-12), the asphalt surge tank and ,and the oxidized asphalt tank are vented to CE-08.

(3) Zero percent (0%) opacity from the three asphalt storage tanks, except for one consecutive 15 minute period in any 24 hour period when the transfer lines are being blown for clearing. If, however, the emissions from any asphalt storage tank(s) are ducted to a control device for a saturator the combined emissions shall meet 20% opacity from the control device, pursuant to 40 CFR 60.472(a). Since this is the case for all asphalt storage tanks (CE-01 for the asphalt storage tanks, CE-08 for the oxidized asphalt storage tank) , 0% opacity shall not apply to this facility unless the control equipment is not in operation.

(4) Four tenths (0.4) of one kilogram of Particulate Matter (PM)(applies only to line 1 and line 2 saturators) per megagram of smooth surfaced roll roofing produced. Since approximately 168,902 megagrams of smooth surfaced roll roofing is produced, no more than 67,561 kg or 74.65 tons of (PM) emissions per year may be emitted

(b) The Permittee is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because the source owns and operates three (3) asphalt storage tanks and one (1) liquid polypropylene tank, each with a capacity greater than 40 cubic meters. Since the capacity of each of the tanks is between 75 cubic meters and 151 cubic meters, and the maximum true vapor pressure is less than 15.0 kilopascals, the tanks are exempt from other provisions of 40 CFR 60 Subpart Kb, except as specified in paragraphs (a) and (b) of 40 CFR 60.116b. Pursuant to 40 CFR 60.116b(a) and (b), the owner or operator of each storage vessel shall keep readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel. These records shall be kept for the life of the source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 2-7 (Part 70 Source Determination)

This source is not currently, and will not be following the construction of the limestone receiving bin (EU-14) and asphalt mixer and surge tank (EU-15), subject to 326 IAC 2-7 (Part 70 Source Determination) since the potential to emit from the existing and new emissions units are 55.43 tons VOC per year, which is below 100 tons per year of any regulated pollutant. Refer to Appendix A, Page 2 of 9 and Page 9 of 9, for VOC detailed emission calculations and summaries.

326 IAC 5-1(Opacity Limitations)

The Opacity regulation 326 IAC 5-1 is generally applicable to all point sources of emissions. Since the source is located in Marion County, and is not located in the areas of Marion County referred to in 326 IAC 5-1-5, pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Non Attainment Area Limitations)

Since the source does not have the potential to emit greater than 100 tons per year of particulate matter, or actual emissions of greater than 10 tons per year of particulate matter, and it is not one of the sources listed in 326 IAC 6-1-12, 326 IAC 6-1 does not apply. Refer to Appendix A, Page 3 and 9 of 9, for PM and PM10 detailed emissions calculations and summaries.

326 IAC 8-5-2 (Miscellaneous operations: asphalt paving)

This facility is not subject to 326 IAC 8-5-2 (Miscellaneous operations: asphalt paving), because the source does not produce asphalt paving.

State Rule Applicability - Individual Facilities

326 IAC 6-2-4 (Indirect Heating)

326 IAC 6-2-4 applies to the 6 MMBtu/ hr thermal fluid heaters (EU-03) and (EU-13) since it is IDEM's policy to apply the definition of "combustion for indirect heating" found in 326 IAC 1-2-19 to heaters which heat an intermediate fluid for heat transfer. In the case of the thermal fluid heaters, the intermediate fluid is the thermal fluid, and that fluid is used to heat the asphalt in the tanks through another heat exchanger. Since the 0.8 MMBtu/hr polyolefin (APP) heater (EU-08) is simply a single heat exchanger inside a tank that does not heat an intermediate fluid, 326 IAC 6-2-4 does not apply to it. 326 IAC 6-2-4 does not apply to the 3 MMBtu/hr warehouse space heater either since it does not meet the definition in 326 IAC 1-2-19. Pursuant to 326 IAC 6-2-4 the PM emissions from EU-03 and EU13 are limited by the following equation:

$$Pt \sim \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu heat input.
Q = Total source maximum operating capacity rating in million Btu per hour heat input. As each new indirect heater is added to the plant Q will increase.

The value of Q for this facility is 12 , therefore the facility is limited to 0.57 pounds of particulate matter per million Btu input. This facility's potential to emit is much lower than this limit.

326 IAC 6-3-2 (Particulate Matter Limitation)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from line 1 operations (EU-01), line 2 operations (EU-12), the lime silo (EU-02), the sand silo (EU-07), the limestone receiving bin (EU-14), and the mixer and surge tank (EU-14) shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The process weight rate per hour of line 1 (EU-01) is 18,836, therefore pursuant to the table in 326 IAC 6-3-2, the particulate emissions are limited to 18.42 lbs/hour. The process weight rate per hour

of line 2 (EU-12) is 13,689, therefore pursuant to the table in 326 IAC 6-3-2, the particulate emissions are limited to 14.87 lbs/hr. These limits are superceded by a more stringent emissions limitation pursuant to 40 CFR 60.470 Subpart UU. See page 9 of 9 in Appendix A of this document for a direct comparison of the limits. The process weight rate per hour of the mixer and surge tank (EU-15) is 5,333 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 7.58 lbs/hour. There are no applicable limits on PM for the asphalt mixer and surge tank from Subpart UU. The asphalt mixer and surge tank is well under this requirement with an uncontrolled potential to emit of 3.15 tons per year. The process weight rate per hour for the calcium carbonate silo (EU-02) is 5,333 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 7.58 lbs/hour. This equipment is well under this requirement with an uncontrolled potential to emit of 2.11 tons per year. The process weight rate per hour for the sand silo (EU-07) is 15,585 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 16.22 lbs/hour. This equipment is well under this requirement with an uncontrolled potential to emit of 1.38 tons per year. The process weight rate per hour for the limestone receiving bin (EU-14) is 3,560 lbs/hr, therefore pursuant to the table in 326 IAC 6-3-2, particulate emissions are limited to 6.03 lbs/hour. This equipment is well under this requirement with an uncontrolled potential to emit of 3.15 tons per year.

326 IAC 6-3-2 does not apply to the 3 MMBtu/hr warehouse heater or the 0.8 MMBtu/hr polyolefin (APP) heater (EU-08), since they both combust gas.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

Line 2 operations (EU-12) were subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), because the facility had the potential to emit 25 tons or more of VOCs per year which were not otherwise regulated by other provisions of Article 8. ERMD determined that, when the costs of control, the benefits of control, the resultant increase in NO_x emissions are taken into account, the BACT VOC control is no control. Uncontrolled potential to emit for line 2 has been determined to be 42.22 tons of VOC emissions per year, therefore currently to meet 8-1-6 BACT requirements, the source is limited to 42.22 tons of VOC emissions per rolling 12 consecutive month period. For a discussion of the previous BACT analysis, see the Technical Support Document (TSD) for CP-0970140-01, issued on November 17, 1997.

326 IAC 8-1-6 does not apply to any other facility at the source, since the Potential to Emit VOC is less than 25 tons per year for all other facilities within the source.

Compliance Requirements

The limestone receiving bin should have compliance monitoring conditions, since it is a mineral handling operation within a roll roofing manufacturing operation, and an NSPS (40 CFR 60.472(d)) applies. Since an opacity standard applies to this facility under the NSPS, a daily visible emission notation shall serve as the applicable compliance monitoring condition. The Monsanto Mist Eliminator should have a visible emission notation as well since an opacity standard applies to it under the same NSPS pursuant to 40 CFR 60.472(a)(3). Visible emission notations on stacks 5, 7, and 1 shall be required as specified below:

Visible Emissions Notations

(a) Weekly visible emission notations of the baghouse exhaust stacks 5 and 7, as well as MME stacks 1and 4, shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during

that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

The following monitoring conditions are necessary because the Monsanto Mist Eliminator (CE-1) must operate properly to ensure compliance with the opacity and particulate matter (PM) limitations set forth in 326 IAC 12, (40 CFR 60.470, Subpart UU.).

(a) The Permittee shall take readings of the total static pressure drop across the Monsanto Mist Eliminator at least once per week. Unless operated under conditions for which the Preventative Maintenance Plan specifies otherwise, the pressure drop across the Monsanto Mist Eliminator shall be maintained within the range of three (3) and twelve (12) inches of water. The Preventative Maintenance Plan for the Monsanto Mist Eliminator shall contain troubleshooting contingency and corrective actions for the Monsanto Mist Eliminator, when the pressure reading is outside of this range for any one reading.

(b) The instrument used for determining the pressure shall be subject to approval by ERMD and shall be calibrated at least once every six (6) months.

(c) The gauge employed to measure the pressure drop across the Monsanto Mist Eliminator or any part of the facility shall have a scale such that the expected normal reading shall be no less than 20 percent of full scale and be accurate within ± 2% of full scale reading. The instrument shall be quality assured and maintained as specified by the vendor.

(d) The permittee shall continuously monitor and record the temperature of the gas at the inlet of the mist eliminator. The temperature monitoring instrument shall have an accuracy of +/- 15^{8}C over its range.

(e) An inspection shall be performed each calendar quarter of the Monsanto Mist Eliminator. A defective Monsanto Mist Eliminator shall be repaired. A record shall be kept of the results of the inspection and the number of Monsanto Mist Eliminator repairs.

(f) In the event that the Monsanto Mist Eliminator's failure has been observed, based upon the findings of the inspection, any additional corrective actions will be devised within eight (8) hours of discovery and will include a timetable for completion.

An initial performance test to determine PM emissions from the units to be constructed (EU-14 and EU15) shall be performed within 180 days from the issuance of this permit in order to determine compliance and set a baseline for future estimation of emissions, since both of these units have control devices.

Conclusion

The construction and operation of this facility for manufacturing asphalt roofing materials shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 097-12488-00140.

Appendix A: Emissions Calculations
Equipment Descriptions

Company Name: **Firestone Building Products Company**
Address City IN Zip: **3525 South Arlington, Indianapolis, Indiana 46203**
FESOP No.: **097-12488-00140**
Plt ID: **00140**
Reviewer: **DRA**
Date: **09/12/2001**

S/V	Emission Unit	Description	Maximum Capacity	Units	Control Equipment	Gas Flow Rate
1	1	System/line 1	18,836	lbs/hour	CE-01	10,000
2	2	Calcium Carbonate Silo	15,593	tons/yr lime	CE-04	
3	3	Thermal Fluid Heater	0.006	MMBtu/hr	None	
7	7	Sand Silo	20,410	tons/yr sand	CE-07	
8	8	APP Tank Heater	0.0008	MMBtu/hr	None	
10	10	Warehouse Heater	0.003	MMBtu/hr	None	
1	12	System/line 2	41,720	lbs/hour	CE-01	
3	13	Heatec Asphalt Heater and Storage Tank	6	MMBtu/hr	None	
11	14	Limestone Receiving Bin	23,360	tons/yr limestone	CE-02	na
1	15	Mixing Screw and Surge Tank	23,360	tons/yr limestone	CE-01	na

Calculations of Potential and Allowable Emissions of VOC from Operating Permit and Line 2 CP

Company Name: Firestone
Address: 3525 S Arlington Ave
FESOP No.: 097-12488-00140
Plt ID: 0140
Reviewer: DRA
Date: 12-Sep-01

Equipment Status	Emiss. Unit ID	Emission Unit Description	Stack ID	Control Device	Control Efficiency %	Max. throughput lb/hr	Max. throughput ton/hr	Max. throughput ton/yr	Flow Rate acfm	Flow Rate scfm	Temp. oF	AP-42 Em. Factor lb/ton	Site Specific Em. Factor lb/ton	PTE (before control) lb/hr	PTE (before control) lb/day	PTE (before control) ton/yr	PTE (after control) lb/hr	PTE (after control) lb/day	PTE (after control) ton/yr	Allowable (326 IAC 8-1-6) lb/hr	Allowable (326 IAC 8-1-6) lb/day	Allowable (326 IAC 8-1-6) ton/yr
First Operating Permit	1	System/line 1	1	Mesh	57.0%	18,836	9.42	82502	10,000	8,013	114	N/A	0.31	2.92	70.07	12.79	2.92	70.07	12.79	2.92	70.07	12.79
	3	Thermal Fluid Heater	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.04	0.86	0.16	0.04	0.86	0.16	0.04	0.86	0.16
	8	APP Tank Heater	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	negl	0.10	negl	negl	0.10	negl	negl	0.10	negl
	10	Warehouse Heater	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.02	0.38	0.10	0.02	0.38	0.10	0.02	0.38	0.10
CP	12	System/line 2	12	Mesh	57.0%	41,720	20.86	182735	10,300	8,253	114	N/A	0.31	6.47	155.20	28.32	6.47	155.20	28.32	6.47	155.20	28.32
	13	Heatec Asphalt Heater and Storage Tank	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.04	0.86	0.16	0.04	0.86	0.16	0.04	0.86	0.16
												Existing VOC		2.98	71.41	13.05	2.98	71.41	13.05	2.98	71.41	13.05
												New CP VOC		6.51	156.06	28.48	6.51	156.06	28.48	6.51	156.06	28.48
												Total VOC		9.49	227.47	41.53	9.49	227.47	41.53	9.49	227.47	**41.53**

N/A - Not Applicable
negl - neglibile

Appendix A

Calculations of Potential and Allowable Emissions of PM and PM10 from Operating Permit and Line 2 CP

Company Name: Firestone
Address: 3525 S Arlington Ave
FESOP No.: 097-12488-00140
Plt ID: 0140
Reviewer: DRA
Date: 12-Sep-01

Equipment Status	Emiss. Unit ID	Emission Unit Description	Stack ID	Control Device	Control Efficiency %	Max. throughput lb/hr	Max. throughput ton/hr	Max. throughput ton/yr	Flow Rate acfm	Flow Rate scfm	Temp. oF	AP-42 Em. Factor lb/ton	Site Specific Em. Factor lb/ton	PTE (before control) lb/hr	PTE (before control) lb/day	PTE (before control) ton/yr	PTE (after control) lb/hr	PTE (after control) lb/day	PTE (after control) ton/yr	Allowable (326 IAC 6-1-2, 0.03 gr/dscf) & (NSPS Subpart UU, 0.04 kg/Mg) lb/hr	Allowable lb/day	Allowable ton/yr
First Operating Permit	1	System/line No. 1	1	Mesh	57.0%	18,836	9.42	82502	10,000	8,013	114	N/A	0.14	1.32	31.64	5.78	0.57	13.61	2.48	0.75	18.04	3.29
	2	Calcium Carbonate Silo	2	Baghouse	99.0%	3,560	1.78	15593	691	600	70	0.27	N/A	0.48	11.53	2.11	0.00	0.12	0.02	0.15	3.70	0.68
	3	Thermal Fluid Heater	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.07	1.75	0.32	0.07	1.75	0.32	0.07	1.75	0.32
	7	Sand Silo	7	Baghouse	99.0%	2,330	1.17	10205	749	650	70	0.27	N/A	0.31	7.55	1.38	0.00	0.08	0.01	0.17	4.01	0.73
	8	APP Tank Heater	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.01	0.22	0.04	0.01	0.22	0.04	0.01	0.22	0.04
	10	Warehouse Heater	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.04	0.88	0.16	0.04	0.88	0.16	0.04	0.88	0.16
CP	9	Sand Silo (1) (2)	9	Baghouse	99.0%	13,255	6.63	68260	749	650	70	0.27	N/A	1.79	42.95	9.22	0.02	0.43	0.09	0.17	4.01	0.86
	12	System/line No.2	12	Mesh	57.0%	13,689	6.84	59959	10,300	8,253	114	N/A	0.14	0.96	23.00	4.20	0.41	9.89	1.80	0.55	13.11	2.39
	13	Heatec Asphalt Heater and Storage Tank	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.07	1.75	0.32	0.07	1.75	0.32	0.07	1.75	0.32
												Existing PM		2.23	53.58	9.78	0.69	16.65	3.04	1.19	28.61	5.22
												New CP PM		2.82	67.70	13.73	0.50	12.07	2.22	0.79	18.88	3.57
												Total PM		5.05	121.27	23.51	1.20	28.72	5.26	1.98	47.49	8.79

N/A - Not Applicable

(1) Existing Sand Silo emissions reflect increase in production from new line only.
(2) No increase in emissions from existing calcium carbonate silo.

0140-003.WK4

N/A - Not Applicable

(1) Existing Sand Silo emissions reflect increase in production from new line only.
(2) No increase in emissions from existing calcium carbonate silo.

Existing PM	12.2	293.7	9.78	0.79	19.1	3.04	1.19	28.61	3.92
New CP PM	8.39	201.4	22.3	1.38	33.2	5.91	1.91	45.73	7.9
Total PM	20.6	495.1	32.1	2.18	52.2	8.95	3.1	74.34	11.82

0140-003.WK4

Appendix A

Calculations of Potential and Allowable Emissions of NOx from Operating Permit and Line 2 CP

Company Name: Firestone
Address: 3525 S Arlington Ave
FESOP No.: 097-12488-00140
Plt ID: 0140
Reviewer: DRA
Date: 12-Sep-01

Equipment Status	Emiss. Unit ID	Emission Unit Description	Stack ID	Control Device	Control Efficiency %	Max. throughput lb/hr	Max. throughput ton/hr	Max. throughput ton/yr	Flow Rate acfm	Flow Rate scfm	Temp. oF	AP-42 Em. Factor lb/ton	PTE (before control) lb/hr	PTE (before control) lb/day	PTE (before control) ton/yr	PTE (after control) lb/hr	PTE (after control) lb/day	PTE (after control) ton/yr	PTE (after control) lb/hr	PTE (after control) lb/day	PTE (after control) ton/yr
First Operating Permit	3	Thermal Fluid Heater	3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.60	14.41	2.63	0.60	14.41	2.63	0.60	#####	2.63
	8	APP Tank Heater	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.08	1.92	0.35	0.08	1.92	0.35	0.08	1.92	0.35
	10	Warehouse Heater	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.30	7.23	1.32	0.30	7.23	1.32	0.30	7.23	1.32
CP	13	Heater and Storage Tank	13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.60	14.41	2.63	0.60	14.41	2.63	0.60	#####	2.63
												Existing NOx	0.98	23.56	4.30	0.98	23.56	4.30	0.98	#####	4.30
												New CP NOx	0.60	14.41	2.63	0.60	14.41	2.63	0.60	#####	2.63
												Total NOx	1.58	37.97	6.93	1.58	37.97	6.93	1.58	#####	6.93

N/A - Not Applicable

0140-004.WK4

Appendix A

Calculations of Potential and Allowable Emissions of CO from Operating Permit and Line 2 CP

Company Name: Firestone
Address: 3525 S Arlington Ave
FESOP No.: 097-12488-00140
Plt ID: 0140
Reviewer: DRA
Date: 12-Sep-01

Equipment Status	Emiss. Unit ID	Emission Unit Description	Stack ID	Control Device	Control Efficiency %	Throughput potential MMCF			Heat Input			AP-42 Em. Factor lb/MMCF	PTE (before control)			PTE (after control)					
						MMCF	/hr	/yr	MMBtu	/hr			lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr
First Operating Permit	3	Thermal Fluid Heater	3	N/A	N/A	N/A	0.0060	52.60	N/A	6.00	N/A	21	**0.13**	**3.02**	0.55	**0.13**	**3.02**	0.55	**0.13**	**3.02**	0.55
	8	APP Tank Heater	8	N/A	N/A	N/A	0.0008	7.00	N/A	0.80	N/A	21	**0.02**	**0.40**	0.07	**0.02**	**0.40**	0.07	**0.02**	**0.40**	0.07
	10	Warehouse Heater	10	N/A	N/A	N/A	0.0030	26.30	N/A	3.00	N/A	21	**0.06**	**1.51**	0.28	**0.06**	**1.51**	0.28	**0.06**	**1.51**	0.28
CP	13	Heater and Storage Tank	13	N/A	N/A	N/A	0.0060	52.60	N/A	6.00	N/A	21	**0.13**	**3.02**	0.55	**0.13**	**3.02**	0.55	**0.13**	**3.02**	0.55
											Existing CO		0.21	4.94	0.90	0.21	4.94	0.90	0.21	4.94	0.90
											New CP CO		0.13	3.02	0.55	0.13	3.02	0.55	0.13	3.02	0.55
											Total CO		**0.33**	**7.96**	**1.45**	**0.33**	**7.96**	**1.45**	**0.33**	**7.96**	**1.45**

N/A - Not Applicable

0140-005.WK4

Appendix A: Emissions Calculations
Emission Calculations

Company Name: **Firestone Building Products Company**
Address City IN Zip: **3525 South Arlington, Indianapolis, Indiana 46203**
FESOP No.: **097-12488-00140**
Plt ID: **00140**
Reviewer: **DRA**
Date: **09/12/2001**

Limestone Receiving Bin Emissions (14)	PM & PM10	
Previously Determined Emission Factor from CP	0.27	lbs/ton
Maximum Limestone Usage Rate	23,360.00	tons/year
Potential To Emit	3.1536	tons/year
Limestone Receiving Bin Dust Collector	PM &PM10	
Maximum Particulate Capacity	3.1536	tons/year
Control Efficiency	99%	
Controlled PTE for Limestone Receiving Bin	0.031536	tons/year

Mixing and Surge Tank Estimates (15):

PM inlet mass loading (lbs/ton, asphalt mixed)	0.27	lbs/ton
VOC inlet mass loading (lbs/ton, asphalt mixed)	1.19	lbs/ton
Maximum limestone mixer loading	23,360.00	tons/year
Monsanto Mist Eliminator Collection Efficiency	78.00%	

	PM & PM10	VOCs
Uncontrolled	3.1536	13.8992
Controlled	0.693792	13.8992

Appendix A: Emissions Calculations
Emission Calculations

Company Name: **Firestone Building Products Company**
Address City IN Zip: **3525 South Arlington, Indianapolis, Indiana 46203**
FESOP No.: **097-12488-00140**
Plt ID: **00140**
Reviewer: **DRA**
Date: **09/12/2001**

Subpart UU Rules

Line	Production	Units	Megagrams/yr	
1	18,836.00	lbs/hr	**74746.52208**	
2	13,689.00	lbs/hr	**54321.78492**	
Total	32,525.00	lbs/hr	**129068.307**	Mg/yr
			51627.3228	kg/yr
			51.6273228	Metric ton/yr
Subpart UU limit is 0.4 kg per Megagram which equals			**56.90879792**	tons/yr

Appendix A

Summary of Potential and Allowable Emissions from Existing Equipment and New Construction

Company Name: Firestone
Address: 3525 S Arlington Ave
FESOP No.: 097-12488-00140
Plt ID: 0140
Reviewer: DRA
Date: 12-Sep-01

Summary of Potential and Allowable Emissions from First Operating Permit

Pollutant	PTE (before control)			PTE (after control)			Allowable		
	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr
PM	12.24	293.69	9.78	4.28	102.64	3.04	1.19	28.61	3.92
PM-10	12.24	293.69	9.78	4.28	102.64	3.04	1.19	28.61	3.92
SO2	negl	negl	negl	negl	negl	negl	negl	negl	negl
NOx	0.98	23.56	4.30	0.98	23.56	4.30	0.98	23.56	4.30
VOC	2.98	71.41	13.05	2.98	71.41	13.05	2.98	71.41	13.05
CO	0.21	4.94	0.90	0.21	4.94	0.90	0.21	4.94	0.90
HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

negl - negligible

Summary of Potential and Allowable Emissions from CP097-0140-01

Pollutant	PTE (before control)			PTE (after control)			Allowable		
	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr
PM	8.39	201.44	22.33	1.38	33.19	5.91	1.91	45.73	7.90
PM-10	8.39	201.44	22.33	1.38	33.19	5.91	1.91	45.73	7.90
SO2	negl	negl	negl	negl	negl	negl	negl	negl	negl
NOx	0.60	14.41	2.63	0.60	14.41	2.63	0.60	14.41	2.63
VOC	6.51	156.06	28.48	6.51	156.06	28.48	6.51	156.06	28.48
CO	0.13	3.02	0.55	0.13	3.02	0.55	0.13	3.02	0.55
HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

negl - negligible

Summary of Potential and Allowable Emissions from Operating Permit and CP

Pollutant	PTE (before control)			PTE (after control)			Allowable		
	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr
PM	20.63	495.14	32.10	5.66	135.82	8.95	3.10	74.34	11.82
PM-10	20.63	495.14	32.10	5.66	135.82	8.95	3.10	74.34	11.82
SO2	negl	negl	negl	negl	negl	negl	negl	negl	negl
NOx	1.58	37.97	6.93	1.58	37.97	6.93	1.58	37.97	6.93
VOC	9.49	227.47	41.53	9.49	227.47	41.53	9.49	227.47	41.53
CO	0.33	7.96	1.45	0.33	7.96	1.45	0.33	7.96	1.45
HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

negl - negligible

Appendix A: Emissions Calculations
Summary of Emission Increases from Proposed Modification
Company Name: Firestone Building Products Company
Address: 3525 South Arlington, Indianapolis, Indiana 46203
FESOP No.: 097-12488-00140
Plt ID: 00140
Reviewer: Dana Armstrong
Date: 09/12/2001

Potential and Allowable Emissions from Operating Permit and CP

Pollutant	PTE (before control)			PTE (after control)			Allowable		
	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr	lb/hr	lb/day	ton/yr
PM	20.63	495.14	32.10	5.66	135.82	8.95	3.10	74.34	11.82
PM-10	20.63	495.14	32.10	5.66	135.82	8.95	3.10	74.34	11.82
SO2	negl	negl	negl	negl	negl	negl	negl	negl	negl
NOx	1.58	37.97	6.93	1.58	37.97	6.93	1.58	37.97	6.93
VOC	9.49	227.47	41.53	9.49	227.47	41.53	9.49	227.47	41.53
CO	0.33	7.96	1.45	0.33	7.96	1.45	0.33	7.96	1.45
HAPs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*See CP-0970140-01

New Equipment/Process/Utilization PTE Before Controls

Source	Emission Stack	Pollutants		
		PM	PM10	VOCs
Limestone Receiving Bin	5	3.15	3.15	0.00
Mixing Screw and Surge Tank	4	3.15	3.15	13.90
Totals		6.31	6.31	13.90

Uncontrolled VOC for line 2	
Line 2	28.32391167
Asphalt Surge Tank & Mixer	13.90
	42.22

New Equipment/Process/Utilization PTE After Controls

Source	Emission Stack	Pollutants		
		PM	PM10	VOCs
Limestone Receiving Bin	5	0.03	0.03	0.00
Mixing Screw and Surge Tank	4	0.69	0.69	13.90
Totals		0.73	0.73	13.90

New Equipment/Process/Utilization PTE Allowable Emissions

Source	Emission Stack	Pollutants					
		PM	PM10	VOCs	cfm	Temp Fahrenheit	dscfm*
Limestone Receiving Bin	5	0.68	0.68	na	600	70	600
Mixing Screw and Surge Tank	4	11.75	11.75	na	11300	114	10433.79791
Totals		12.42	12.42	na			

*Moisture content negligible

New Potential and Allowable Emissions

Pollutant	PTE (before control)	PTE (after control)	Allowable (326 IAC 6-1-2)
	ton/yr	ton/yr	ton/yr
PM	38.41	9.68	12.42
PM-10	38.41	9.68	12.42
SO2	negl	negl	na
NOx	6.93	6.93	na
VOC	55.43	55.43	na
CO	1.45	1.45	na
HAPs	0.00	0.00	na

Process Weight Rule Comparison				**Subpart UU**	
Facility	Throughput (lbs/hour)	PM limit	PM limit (tpy)	Throughput Mg per year	PM limit (tpy)
Line 1	18836	18.421974	80.68824824	129068.307	51.627323
Line 2	13689	14.8752	65.15337611		
Limestone Receiving Bin	5333	7.9097858	34.64486164		
Mixer and Surge Tank	5333	7.9097858	34.64486164		
Limestone Storage Silo	3560	6.0334436	26.42648302		
Sand Storage Silo	15585	16.225845	71.06920062		
Bag Breaker	1752	3.7519894	16.43371376		
		71.376035	329.060745		